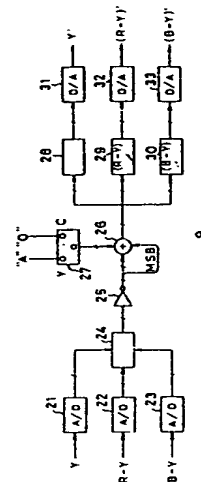


#### 4) COLOR DIFFERENCE SIGNAL INVERTING CIRCUIT

(1) 2-54694 (A) (43) 23.2.1990 (19) JP  
 (21) Appl. No. 63-206088 (22) 19.8.1988  
 (71) TOSHIBA CORP (72) SEIICHI TANAKA  
 (51) Int. Cl. H04N9/74

**PURPOSE:** To avoid a colored achromatic part or noninversion of part of a picture by discriminating the polarity of a digitized color difference signal and converting the color difference signal into 2's complement when the polarity is positive and converting the signal into 1's complement when negative.

**CONSTITUTION:** A level inverting section comprising an inverter circuit 25, an adder circuit 26 and a data selector 27 discriminate the polarity according to the value of the most significant bit of color difference signals R-Y, B-Y. When the polarity is positive, the color difference signals R-Y, B-Y are converted into 2's complement and when negative the color difference signals R-Y, B-Y are converted into 1's complement for the level conversion. Thus, the positive number is converted into a negative number with the same absolute value, 0 is converted into 0 and a negative number is converted into a positive number whose absolute value is less by 1. Since 0 is converted into 0, the achromatic part remains achromatic. Moreover, the negative maximum value is inverted into a positive maximum value and any sample is inverted without fail.



28: interpolation, 24: multiplex, a: extract

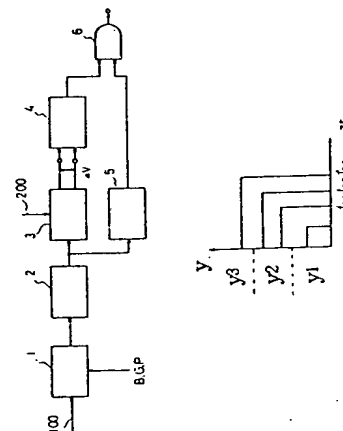
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#### (54) SIGNAL SYSTEM DISCRIMINATING CIRCUIT

(11) 2-54695 (A) (43) 23.2.1990 (19) JP  
 (21) Appl. No. 63-204658 (22) 19.8.1988  
 (71) TOSHIBA CORP (72) KAZUHIRO MUTO  
 (51) Int. Cl. H04N9/80

**PURPOSE:** To attain accurate decision of the signal system at all times by extracting a burst signal from a video signal, converting the frequency of the burst signal into a voltage, sharing the converted voltage into between two terminals and deciding the system of the video signal based on the voltage difference between the two terminals.

**CONSTITUTION:** A video signal 100 to be discriminated is inputted to a signal extraction circuit 1, where a burst signal is extracted synchronously with burst gate pulses B, G, P inputted separately. Then the result is fed to a frequency-voltage conversion circuit 2 and the signal is converted into a voltage corresponding to the frequency. An area discrimination circuit 5 distinguishes the black/white area, the SECAM area and the PAL area according to the inputted voltage. On the other hand, a sharing circuit 3 shares the voltage inputted from the circuit 2 into two for each 1H. The decision circuit 4 decides the type of the signal system based on the difference of the two voltages to be inputted. An AND circuit 6 decides the signal to be the SECAM system only when the output of the decision circuit 4 and the output of the area decision circuit 5 are both high level signals H.



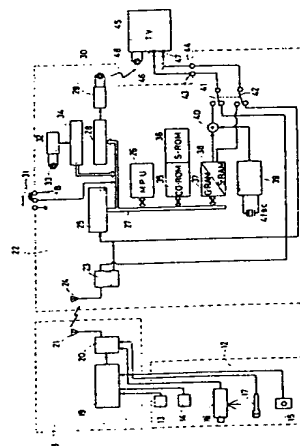
y: voltage, x: frequency, y1: black/white, y2: SECAM, y3: PAL

#### (54) SECURITY SYSTEM

(11) 2-54696 (A) (43) 23.2.1990 (19) JP  
 (21) Appl. No. 63-206615 (22) 19.8.1988  
 (71) SHARP CORP (72) TAKAO ABUMI  
 (51) Int. Cl. H04Q9/00, G08B13/196, G08B27/00, H04N7/18

**PURPOSE:** To attain prescribed notice by switching the reception mode into an annunciation mode forcibly when a home use television receiver is used as, e.g., an annunciation means if the receiver is receiving a television program but it is required to make any annunciation.

**CONSTITUTION:** If a visitor comes a gate door and a call button is depressed, a camera video image/microphone audio signal is produced respectively by a monitor video camera 16 and a monitor microphone 17. The signal is sent to a reception section 22 via a modulation circuit 20 and a transmission antenna 21. Each sent signal is received by a reception antenna 24 of the reception section 22 and demodulated by a demodulation circuit 23. A remote control signal is generated through a serial/parallel conversion circuit 25 and a control circuit 26 to control a television receiver 45 remotely based on the demodulated FSK signal and the signal is sent to the television receiver 45 via a remote control encoder 28 and a modulation circuit 29.



39: TV signal generation, 32: demodulation, 34: remote control encoder